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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/622,181

07/16/2003

William C. Gustafson

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NEUSTEL LAW OFFICES, LTD.  
2534 SOUTH UNIVERSITY DRIVE  
SUITE 4  
FARGO, ND 58103

EXAMINER

KASENGE, CHARLES R

ART UNIT

PAPER NUMBER

2121

MAIL DATE

DELIVERY MODE

12/22/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/622,181	<b>Applicant(s)</b> GUSTAFSON ET AL.	
	<b>Examiner</b> CHARLES R. KASENGE	<b>Art Unit</b> 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8-13 and 17-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8,9,11-13 and 17-22 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. The indicated allowability of claims 8, 9, 11-13, 17, 18 and 20-22 is withdrawn in view of the newly discovered reference(s) to et al. U.S. Patent 4,073,315. Rejections based on the newly cited reference(s) follow.
2. Claims 10 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to overcome any 112 rejections and are rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 19 recites the limitation "said pump" in line 4. There is insufficient antecedent basis for this limitation in the claim.
6. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: how the pump relates to the other elements in the disclosed method.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 8, 9, 11-13, 17, 18 and 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by McClocklin et al. U.S. Patent 4,073,315.

9. Regarding claims 8 and 17, McClocklin discloses a method of operating a plurality of valves in a spray chamber, said method comprising the steps of: determining fluid presence at one or more of said valves (col. 1 and 2, lines 56-3; col. 3, lines 26-37, wherein the pressure indicates a fluid presence); opening one or more of said valves that have fluid present (col. 3, lines 26-43); activating a pump fluidly connected to said valves (col. 3, lines 2-3); and determining if a state change (free fluid flow) is required of any of said valves and executing said state changes if at least two valves are open (col. 1 and 2, lines 56-3).

Regarding claims 9 and 18, McClocklin discloses the method of operating a plurality of valves in a spray chamber of Claim 8, including the step of executing a one valve open recovery routine when if a state change is required to open a second valve and only a first valve is currently open (col. 1 and 2, lines 56-3).

Regarding claim 11 and 20, McClocklin discloses the method of operating a plurality of valves in a spray chamber of Claim 8, including the step of performing a routine valve scheduler

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routine (force multiplying leverage system) upon said valves for maintaining said valves in their respective desired state (col. 5, lines 16-25).

Regarding claims 12 and 21, McClocklin discloses the method of operating a plurality of valves in a spray chamber of Claim 11, wherein said routine valve scheduler routine is comprised of the steps of: (a) energizing a first valve to an appropriate state; and (b) repeating step (a) for a next valve (col. 1 and 2, lines 56-3).

Regarding claims 13 and 22, McClocklin discloses the method of operating a plurality of valves in a spray chamber of Claim 11, wherein said routine valve scheduler routine is comprised of the steps of: (a) energizing a first valve to an appropriate state (; and (b) repeating step (a) for a next valve after a time period (col. 1 and 2, lines 56-3, wherein the time period is the time from when the first valve is opened to when the certain level of reduced fluid pressure is reached).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES R. KASENGE whose telephone number is (571)272-3743. The examiner can normally be reached on Monday through Friday, 8:30 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on 571 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CK

December 18, 2008

/Charles R Kasenge/  
Examiner, Art Unit 2121